

? e au=gazit, ehud?

| Ref | Items | Index-term |
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| E1 | 85 | AU=GAZIT, E. |
| E2 | 207 | AU=GAZIT, EHUD |
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| | 276 | S E1-E4 |

? s s1 and toxin

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? e au=cherny, izhack?

| Ref | Items | Index-term |
|-----|-------|--------------------|
| E1 | 1 | AU=CHERNY, IV |
| E2 | 27 | AU=CHERNY, IZHACK |
| E3 | 0 | AU=CHERNY, IZHACK? |
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E19 1 AU=CHERNY, MATHEW A.
 E20 15 AU=CHERNY, N.
 E21 7 AU=CHERNY, N. E.
 E22 6 AU=CHERNY, N. I.
 E23 6 AU=CHERNY, N. V.
 E24 6 AU=CHERNY, N.E.
 E25 1 AU=CHERNY, N.F.
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 27 AU=CHERNY, IZHACK
 0 AU=CHERNY, IZHACK?
 S3 28 S E1-E3

? s s3 and antitoxin
 28 S3
 21712 ANTITOXIN
 S4 22 S S3 AND ANTITOXIN

? t s4/3,k/1-22

>>w: KWIC option is not available in file(s): 399

4/3,k/1 (Item 1 from file: 24) Links

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CSA Life Sciences Abstracts

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The yefM-yoeB Toxin-Antitoxin Systems of Escherichia coli and Streptococcus pneumoniae: Functional and Structural Correlation

Nieto, Concha; Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wai Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel Centro de Investigaciones Biologicas, CSIC, Madrid, Spain. Department of Molecular Microbiology and Biotechnology, Tel Aviv University, Tel Aviv 69978, Israel. Department of Biotechnology, Malaysia University of Science and Technology, Petaling Jaya, Malaysia

Journal of Bacteriology , v 189 , n 4 , p 1266-1278 , February 2007

Publication Date: 2007

Publisher: American Society for Microbiology, 1752 N Street N.W. Washington, DC 20036 USA, [URL:http://www.asm.org/]

Document Type: Journal Article

Record Type: Abstract

Language: English

Summary Language: English

ISSN: 0021-9193

Electronic Issn: 1098-5530

File Segment: Bacteriology Abstracts (Microbiology B)

The yefM-yoeB Toxin-Antitoxin Systems of Escherichia coli and Streptococcus pneumoniae: Functional and Structural Correlation

Nieto, Concha; Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wai Ting; Yeo, Chew Chieng; Gazit...

Abstract:

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0002893868 IP Accession No: 6517911

The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded YefM Antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud Department of Molecular Microbiology and Biotechnology, George S. Wise Faculty of Life Sciences, Tel Aviv University, Tel Aviv 69978, Israel

Journal of Biological Chemistry, v 280, n 34, p 30063-30072, August 2005

Publication Date: 2005

Publisher: American Society for Biochemistry and Molecular Biology, 9650 Rockville Pike Bethesda MD 20814-3996 USA, [mailto:asbmb@asbmb.faseb.org], [URL:http://www.jbc.org]

Document Type: Journal Article

Record Type: Abstract

Language: English

Summary Language: English

ISSN: 0021-9258

Electronic ISSN: 1083-351X

File Segment: Bacteriology Abstracts (Microbiology B); Genetics Abstracts

...YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded YefM Antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

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The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded YefM Antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud Department of Molecular Microbiology and Biotechnology, George S. Wise Faculty of Life Sciences, Tel Aviv University, Tel Aviv 69978, Israel
Journal of Biological Chemistry, v 280, n 34, p 30063-30072, August 2005
Publication Date: 2005
Publisher: American Society for Biochemistry and Molecular Biology, 9650 Rockville Pike Bethesda MD 20814-3996 USA, [mailto:asbmb@asbmb.faseb.org], [URL:http://www.jbc.org]

Document Type: Journal Article
Record Type: Abstract
Language: English
Summary Language: English
ISSN: 0021-9258
Electronic ISSN: 1083-351X
File Segment: Bacteriology Abstracts (Microbiology B); Genetics Abstracts
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The yefM-yoeB Toxin-Antitoxin Systems of Escherichia coli and Streptococcus pneumoniae: Functional and Structural Correlation

Nieto, Concha; Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wai Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel Centro de Investigaciones Biologicas, CSIC, Madrid, Spain. Department of Molecular Microbiology and Biotechnology, Tel Aviv University, Tel Aviv 69978, Israel. Department of Biotechnology, Malaysia University of Science and Technology, Petaling Jaya, Malaysia
Journal of Bacteriology, v 189, n 4, p 1266-1278, February 2007
Publication Date: 2007
Publisher: American Society for Microbiology, 1752 N Street N.W. Washington, DC 20036 USA, [URL:http://www.asm.org/]

Document Type: Journal Article
Record Type: Abstract
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ISSN: 0021-9193

Electronic Issn: 1098-5530

File Segment: Bacteriology Abstracts (Microbiology B)

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The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded yefM Antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud Department of Molecular Microbiology and Biotechnology, George S. Wise Faculty of Life Sciences, Tel Aviv University, Tel Aviv 69978, Israel

Journal of Biological Chemistry, v 280, n 34, p 30063-30072, August 2005

Publication Date: 2005

Publisher: American Society for Biochemistry and Molecular Biology, 9650 Rockville Pike Bethesda MD 20814-3996 USA, [mailto:asbmb@asbmb.faseb.org], [URL:http://www.jbc.org]

Document Type: Journal Article

Record Type: Abstract

Language: English

Summary Language: English

ISSN: 0021-9258

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File Segment: Bacteriology Abstracts (Microbiology B)

...YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded yefM Antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud

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The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded YefM Antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud Department of Molecular Microbiology and Biotechnology, George S. Wise Faculty of Life Sciences, Tel Aviv University, Tel Aviv 69978, Israel
Journal of Biological Chemistry, v 280, n 34, p 30063-30072, August 2005
Publication Date: 2005
Publisher: American Society for Biochemistry and Molecular Biology, 9650 Rockville Pike Bethesda MD 20814-3996 USA, [mailto:asbmb@asbmb.faseb.org], [URL:http://www.jbc.org]

Document Type: Journal Article
Record Type: Abstract
Language: English
Summary Language: English
ISSN: 0021-9258
Electronic ISSN: 1083-351X
File Segment: Bacteriology Abstracts (Microbiology B)
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6009748 H.W. Wilson Record Number: BGS07151710
Structural and Thermodynamic Characterization of the Escherichia coli RelBE Toxin-Antitoxin System: Indication for a Functional Role of Differential Stability

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Cherny, Izhack
Overgaard, Martin; Borch, Jonas
Biochemistry (American Chemical Society) v. 46 no43 (October 30 2007) p. 12152-63
Document Type: Feature Article
Special Features: Bibliographic Footnote Graph Illustration Table ISSN: 0006-2960
Language: English
Country of Publication: United States
Structural and Thermodynamic Characterization of the Escherichia coli RelBE
Toxin-Antitoxin System: Indication for a Functional Role of Differential Stability

Cherny, Izhack

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5962625 H.W. Wilson Record Number: BGSA07109307
The yefM-yoeB Toxin-Antitoxin Systems of Escherichia coli and Streptococcus
pneumoniae: Functional and Structural Correlation

Nieto, Concha
Cherny, Izhack; Khoo, Seok Kooi
Journal of Bacteriology v. 189 no4 (February 2007) p. 1266-78
Document Type: Feature Article
Special Features: Bibliography Graph Illustration Table ISSN: 0021-9193
Language: English
Country of Publication: United States
The yefM-yoeB Toxin-Antitoxin Systems of Escherichia coli and Streptococcus
pneumoniae: Functional and Structural Correlation

Cherny, Izhack...

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2129480 H.W. Wilson Record Number: BBAI07163431
Structural and Thermodynamic Characterization of the Escherichia coli RelBE
Toxin-Antitoxin System: Indication for a Functional Role of Differential Stability

Cherny, Izhack
Overgaard, Martin; Borch, Jonas
Biochemistry (American Chemical Society) v. 46 no43 (October 30 2007) p. 12152-63
ISSN: 0006-2960
Structural and Thermodynamic Characterization of the Escherichia coli RelBE
Toxin-Antitoxin System: Indication for a Functional Role of Differential Stability
Cherny, Izhack

4/3,K/10 (Item 2 from file: 143) Links
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2077317 H.W. Wilson Record Number: BBAI07110528
The yefM-yoeB Toxin-Antitoxin Systems of Escherichia coli and Streptococcus
pneumoniae: Functional and Structural Correlation

Nieto, Concha
Cherny, Izhack; Khoo, Seok Kooi
Journal of Bacteriology v. 189 no4 (February 2007) p. 1266-78
ISSN: 0021-9193
The yefM-yoeB Toxin-Antitoxin Systems of Escherichia coli and Streptococcus
pneumoniae: Functional and Structural Correlation
Cherny, Izhack...

4/3,K/11 (Item 3 from file: 143) Links

Biol. & Agric. Index

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1881329 H.W. Wilson Record Number: BBAI05152088

The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded YefM Antitoxin. Implications for a Structural-based Differential Stability of Toxin-antitoxin Systems

Cherny, Izhack

Rockah, Liat; Gazit, Ehud

The Journal of Biological Chemistry v. 280 no34 (August 26 2005) p. 30063-72

ISSN: 0021-9258

...YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded YefM Antitoxin. Implications for a Structural-based Differential Stability of Toxin-antitoxin Systems

Cherny, Izhack

4/3,K/12 (Item 4 from file: 143) Links

Biol. & Agric. Index

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1747987 H.W. Wilson Record Number: BBAI04118529

The YefM Antitoxin Defines a Family of Natively Unfolded Proteins: Implications as a Novel Antibacterial Target

Cherny, Izhack

Gazit, Ehud

The Journal of Biological Chemistry v. 279 no9 (Feb. 27 2004) p. 8252-61

Document Type: Feature Article ISSN: 0021-9258

The YefM Antitoxin Defines a Family of Natively Unfolded Proteins: Implications as a Novel Antibacterial Target

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147516306 CA: 147(25)516306m JOURNAL

Structural and Thermodynamic Characterization of the Escherichia coli RelBE

Toxin-Antitoxin System: Indication for a Functional Role of Differential Stability

Author: Cherny, Izhack; Overgaard, Martin; Borch, Jonas; Bram, Yaron; Gerdes, Kenn;

Gazit, Ehud

Location: Department of Molecular Microbiology and Biotechnology, George S. Wise

Faculty of Life Sciences, Tel Aviv University, 69978, Tel Aviv-Jaffa, Israel

Journal: Biochemistry

Date: 2007

Volume: 46 Number: 43 Pages: 12152-12163

CODEN: BICHAW

ISSN: 0006-2960

Publisher Item Identifier: 0006-2960(70)01037-1

Language: English

Publisher: American Chemical Society

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CA: 147(23)482564b

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antitoxintoxin.txt
Bacterial toxin-antitoxin systems as targets for the development of novel
antibiotics
Author: Alonso, Juan C.; Balsa, Dolores; Cherny, Izhack; Christensen, Susanne K.;
Espinosa, Manuel; Francuski, Djordje; Gazit, Ehud; Gerdes, Kenn; Hitchin, Ed;
Martin, M. Teresa; Nieto, Concepcion; Overweg, Karin; Pellicer, Teresa; Saenger,
Wolfram; Welfle, Heinz; Welfle, Karin; Wells, Jerry
Location: Department of Microbial Biotechnology, Centro Nacional de Biotecnologia,
CSIC, Madrid, Spain, 28049
Journal: Enzyme-Mediated Resist. Antibiot.
Editor: Bonomo, Robert A. (Ed), Tolmashy, Marcelo (Ed),
Date: 2007
Pages: 313-329
CODEN: 69JIC6
Language: English
Publisher: American Society for Microbiology , Washington, D. C

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146200059 CA: 146(11)200059w JOURNAL
The yefM-yoeB toxin-antitoxin systems of Escherichia coli and Streptococcus
pneumoniae: functional and structural correlation
Author: Nieto, Concha; Cherny, Izhack; Khoo, Seok Kooi; Garcia de Lacoba, Mario;
Chan, Wai Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel
Location: Centro de Investigaciones Biologicas, CSIC, Madrid, Spain,
Journal: J. Bacteriol.
Date: 2007
Volume: 189 Number: 4 Pages: 1266-1278
CODEN: JOBAAY
ISSN: 0021-9193
Language: English
Publisher: American Society for Microbiology

4/3,K/16 (Item 4 from file: 399) Links
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143223992 CA: 143(13)223992x JOURNAL
The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded
YefM Antitoxin: implications for a structural-based differential stability of
toxin-antitoxin systems
Author: Cherny, Izhack; Rockah, Liat; Gazit, Ehud
Location: George S. Wise Faculty of Life Sciences, Department of Molecular
Microbiology and Biotechnology, Tel Aviv University, 69978, Tel Aviv-Jaffa, Israel
Journal: J. Biol. Chem.
Date: 2005
Volume: 280 Number: 34 Pages: 30063-30072
CODEN: JBCHA3
ISSN: 0021-9258
Language: English
Publisher: American Society for Biochemistry and Molecular Biology

4/3,K/17 (Item 5 from file: 399) Links
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142367629 CA: 142(20)367629m PATENT
Page 9

antitoxintoxin.txt
 Antibacterial agents disrupting toxin-antitoxin binding and methods of identifying and utilizing such agents
 Inventor (Author): Gazit, Ehud; Cherny, Izhack
 Location: Israel
 Assignee: Ramot at Tel Aviv University Ltd.
 Patent: PCT International ; WO 200531362 A2 Date: 20050407
 Application: WO 2004IL898 (20040927) *US 2003PV507488 (20031002) *US 2004PV550334 (20040308)
 Pages: 108 pp.
 CODEN: PIXXD2
 Language: English
 Patent Classifications:
 Class: G01N-033/68A
 Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW
 Designated Regional: BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

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140334320 CA: 140(21)334320j JOURNAL
 The YefM Antitoxin Defines a Family of Natively Unfolded Proteins: Implications as a Novel Antibacterial Target
 Author: Cherny, Izhack; Gazit, Ehud
 Location: George S. Wise Faculty of Life Sciences, Department of Molecular Microbiology and Biotechnology, Tel-Aviv University, 69978, Tel-Aviv, Israel
 Journal: J. Biol. Chem.
 Date: 2004
 Volume: 279 Number: 9 Pages: 8252-8261
 CODEN: JBCHA3
 ISSN: 0021-9258
 Language: English
 Publisher: American Society for Biochemistry and Molecular Biology

4/3,K/19 (Item 1 from file: 8) Links
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 0018022974 E.I. COMPENDEX No: 20074510904220
 Structural and thermodynamic characterization of the Escherichia coli RelBE toxin-antitoxin system: Indication for a functional role of differential stability
 Cherny, Izhack; Overgaard, Martin; Borch, Jonas; Bram, Yaron; Gerdes, Kenn; Gazit, Ehud
 Corresp. Author/Affil: Gazit, E.: Department of Molecular Microbiology and Biotechnology, George S. Wise Faculty of Life Sciences, Tel Aviv University, Tel Aviv 69978, Israel
 Corresp. Author email: ehudg@post.tau.ac.il
 Biochemistry (Biochemistry) (United States) 2007 46/43 (12152-12163)
 Publication Date: 20071030
 Publisher: American Chemical Society
 CODEN: BICHA ISSN: 0006-2960
 Item Identifier (DOI): 10.1021/bi701037e

antitoxintoxin.txt

Document Type: Article; Journal Record Type: Abstract
Treatment: L; (Literature review); X; (Experimental)
Language: English Summary Language: English
Number of References: 63
Structural and thermodynamic characterization of the Escherichia coli RelBE toxin-antitoxin system: Indication for a functional role of differential stability

Cherny, Izhack; Overgaard, Martin; Borch, Jonas; Bram, Yaron; Gerdes, Kenn; Gazit, Ehud

The RelE and RelB proteins constitute the RNA interferase (toxin) and its cognate inhibitor (antitoxin) components of the Escherichia coli relBE toxin-antitoxin system. Despite the well-described functionality and physiological activity of this system in E. coli... components from E. coli in solution, both separately and in their complexed state. The RelB antitoxin, an alpha-helical protein according to circular dichroism and infrared spectroscopy, forms oligomers in solution...

Descriptors:

4/3,K/20 (Item 2 from file: 8) Links

Fulltext available through: STIC Full Text Retrieval Options

Ei Compendex(R)

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0016688330 E.I. COMPENDEX No: 2005369345704

The YoeB toxin is a folded protein that forms a physical complex with the unfolded YefM antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud

Corresp. Author/Affil: Gazit, E.: Dept. of Molecular Microbiology and Biotechnology, Tel Aviv University, Tel Aviv 69978, Israel

Corresp. Author email: ehudg@post.tau.ac.il

Journal of Biological Chemistry (J. Biol. Chem.) (United States) 2005 280/34 (30063-30072)

Publication Date: 20050826

Publisher: American Society for Biochemistry and Molecular Biology Inc.

CODEN: JBCHA ISSN: 0021-9258

Item Identifier (DOI): 10.1074/jbc.M506220200

Document Type: Article; Journal Record Type: Abstract

Treatment: X; (Experimental)

Language: English Summary Language: English

Number of References: 55

...YoeB toxin is a folded protein that forms a physical complex with the unfolded YefM antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud

The chromosomal YoeB-YefM toxin-antitoxin module common to numerous strains of bacteria is presumed to have a significant role in survival under stringent conditions. Recently we showed that the purified YefM antitoxin is a natively unfolded protein, as we previously reported for the Phd antitoxin in the P1 phage Doc-Phd toxin-antitoxin system. Here we report the purification and structural properties of the YoeB toxin and present... Q-Sepharose ion-exchange chromatography implying the formation of a YoeB-YefM complex. The unstable antitoxin was removed from the mixture by natural proteolysis, and the residual YoeB protein was purified... thermal unfolding at temperatures up to 56 (deg)C. The thermodynamic features of the toxin-antitoxin complex were similar. Taken together, our results support the notion of a correlation between differential physiological and structural stability in toxin- antitoxin modules. (c) 2005 by The American Society for Biochemistry and Molecular Biology, Inc.

Descriptors:

Identifiers: Antitoxin; Conformational stability; Ion exchange chromatography; Structural stability

4/3,K/21 (Item 3 from file: 8) Links
Fulltext available through: STIC Full Text Retrieval Options
Ei Compendex(R)
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0015854420 E.I. COMPENDEX No: 2004128066957
The YefM antitoxin defines a family of natively unfolded proteins: Implications as a novel antibacterial target

Cherny, Izhack; Gazit, Ehud
Corresp. Author/Affil: Gazit, E.: Dept. of Molec. Microbiol./Biotech., Tel-Aviv University, Green Bldg., Ramat-Aviv, Tel-Aviv 69978, Israel
Corresp. Author email: ehudg@post.tau.ac.il
Journal of Biological Chemistry (J. Biol. Chem.) (United States) 2004 279/9 (8252-8261)

Publication Date: 20040227
Publisher: American Society for Biochemistry and Molecular Biology Inc.
CODEN: JBCHA ISSN: 0021-9258
Item Identifier (DOI): 10.1074/jbc.M308263200

Document Type: Article; Journal Record Type: Abstract
Treatment: T; (Theoretical)
Language: English Summary Language: English
Number of References: 32

The YefM antitoxin defines a family of natively unfolded proteins: Implications as a novel antibacterial target

Cherny, Izhack; Gazit, Ehud
...well understood. Here, we demonstrate that the Escherichia coli YefM protein is a natively unfolded antitoxin, lacking secondary structure even at low temperature or in the presence of a stabilizing agent... ..Indeed, a pair-constrained bioinformatic analysis facilitated the definite determination of novel YefM-yoeB toxin-antitoxin systems in a large number of bacteria including major pathogens such as Staphylococcus aureus, Streptococcus...
Descriptors:

4/3,K/22 (Item 1 from file: 149) Links
TGG Health&Wellness DB(SM)
(c) 2009 Gale/Cengage. All rights reserved.
03335715 Supplier Number: 163707106 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The yefM-yoeB toxin-antitoxin systems of Escherichia coli and Streptococcus pneumoniae: functional and structural correlation.(Author abstract)

Nieto, Concha; Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wai Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel
Journal of Bacteriology , 189 , 3-4 , 1266(13)
Feb ,
2007

Document Type: Author abstract Publication Format: Magazine/Journal
ISSN: 0021-9193
Language: English
Record Type: Abstract Target Audience: Academic
The yefM-yoeB toxin-antitoxin systems of Escherichia coli and Streptococcus pneumoniae: functional and structural correlation.(Author abstract)

...Cherny, Izhack
Author Abstract: Toxin-antitoxin loci belonging to the yefM-yoeB family are located in the chromosome or in some... ..We cloned the yefM-yoeB locus of Streptococcus pneumoniae, and these genes encode bona fide antitoxin (Yef(M.sub.Spn)) and toxin (Yoe(B.sub.Spn)) products. We showed that overproduction... ..12 strains. The yoe(B.sub.Spn)-mediated toxicity could be reversed by the cognate antitoxin, yef(M.sub.Spn), but not by overproduction of the E. coli YefM antitoxin. The

antitoxintoxin.txt

pneumococcal proteins were purified and were shown to interact with each other both in vitro and in vivo. Far-UV circular dichroism analyses indicated that the pneumococcal antitoxin was partially, but not totally, unfolded and was different than its E. coli counterpart. Molecular... ..whereas the antitoxins appeared to be specifically designed for each bacterial locus; thus, the toxin-antitoxin interactions were adapted to the different bacterial environmental conditions. Both structural features, folding and the...

Text:

? d s

| Set | Items | Description |
|-----|-------|--------------------|
| S1 | 276 | S E1-E4 |
| S2 | 42 | S S1 AND TOXIN |
| S3 | 28 | S E1-E3 |
| S4 | 22 | S S3 AND ANTITOXIN |

? s s2

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|----|----|------|
| S5 | 42 | S S2 |
|----|----|------|

? s s5 and toxin

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| | 42 | S5 |
| | 1066342 | TOXIN |
| S6 | 42 | S S5 AND TOXIN |

? s s6 and toxin

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| | 42 | S6 |
| | 1066342 | TOXIN |
| S7 | 42 | S S6 AND TOXIN |

? rd

>>>W: Duplicate detection is not supported for File 393.

Duplicate detection is not supported for File 391.

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| S8 | 22 | RD (UNIQUE ITEMS) |
|----|----|-------------------|

? t s8/3,k/1-22

>>>W: KWIC option is not available in file(s): 399

8/3,k/1 (Item 1 from file: 24) Links

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CSA Life Sciences Abstracts

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0003502673 IP Accession No: 8820610

Crystallization of Doc and the Phd-Doc toxin-antitoxin complex

Garcia-Pino, Abel; Dao-Thi, Minh-Hoa; Gazit, Ehud; Magnuson, Roy David; Wyns, Lode; Loris, Remy Laboratorium voor Ultrastructuur, Vrije Universiteit Brussel, Pleinlaan 2, B-1050 Brussel, Belgium, [mailto:agarcia@vub.ac.be]

Acta Crystallographica Section F, v 64, n 11, p 1034-1038, November 1, 2008

Publication Date: 2008

Publisher: Blackwell Publishing Ltd., 9600 Garsington Road

Document Type: Journal Article

Record Type: Abstract

Language: English

Summary Language: English

ISSN: 1744-3091

File Segment: Bacteriology Abstracts (Microbiology B)

Crystallization of Doc and the Phd-Doc toxin-antitoxin complex

Garcia-Pino, Abel; Dao-Thi, Minh-Hoa; Gazit, Ehud; Magnuson, Roy David; Wyns, Lode;

Loris, Remy

Abstract:

...its plasmidic form in *Escherichia coli* and is the archetype of a family of bacterial toxin-antitoxin modules. The His66Tyr mutant of Doc (Doc super(H66Y)) was crystallized in space group...

8/3,K/2 (Item 2 from file: 24) Links

Fulltext available through: STIC Full Text Retrieval Options

CSA Life Sciences Abstracts

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0003013616 IP Accession No: 7288149

The yefM-yoeB Toxin-Antitoxin Systems of *Escherichia coli* and *Streptococcus pneumoniae*: Functional and Structural Correlation

Nieto, Concha; Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wai Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel Centro de Investigaciones Biológicas, CSIC, Madrid, Spain, Department of Molecular Microbiology and Biotechnology, Tel Aviv University, Tel Aviv 69978, Israel. Department of Biotechnology, Malaysia University of Science and Technology, Petaling Jaya, Malaysia

Journal of Bacteriology, v 189, n 4, p 1266-1278, February 2007

Publication Date: 2007

Publisher: American Society for Microbiology, 1752 N Street N.W. Washington, DC 20036 USA, [URL:<http://www.asm.org/>]

Document Type: Journal Article

Record Type: Abstract

Language: English

Summary Language: English

ISSN: 0021-9193

Electronic Issn: 1098-5530

File Segment: Bacteriology Abstracts (Microbiology B)

The yefM-yoeB Toxin-Antitoxin Systems of *Escherichia coli* and *Streptococcus pneumoniae*: Functional and Structural Correlation

...Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wai Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel

Abstract:

Toxin-antitoxin loci belonging to the yefM-yoeB family are located in the chromosome or in... locus of *Streptococcus pneumoniae*, and these genes encode bona fide antitoxin (YefM sub(Spn)) and toxin (YoeB sub(Spn)) products. We showed that overproduction of YoeB sub(Spn) is toxic to... homologous, whereas the antitoxins appeared to be specifically designed for each bacterial locus; thus, the toxin-antitoxin interactions were adapted to the different bacterial environmental conditions. Both structural features, folding and...

8/3,K/3 (Item 3 from file: 24) Links

Fulltext available through: STIC Full Text Retrieval Options

CSA Life Sciences Abstracts

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0002893868 IP Accession No: 6517911

The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded YefM Antitoxin: Implications for a structural-based differential stability of toxin-antitoxin systems

Cherny, Izhack; Rockach, Liat; Gazit, Ehud Department of Molecular Microbiology and Biotechnology, George S. Wise Faculty of Life Sciences, Tel Aviv University, Tel

Aviv 69978, Israel

Journal of Biological Chemistry , v 280 , n 34 , p 30063-30072 , August 2005

Publication Date: 2005

Publisher: American Society for Biochemistry and Molecular Biology, 9650 Rockville

Pike Bethesda MD 20814-3996 USA, [mailto:asbmb@asbmb.faseb.org],

[URL:http://www.jbc.org]

Document Type: Journal Article

Record Type: Abstract

Language: English

Summary Language: English

ISSN: 0021-9258

Electronic Issn: 1083-351X

File Segment: Bacteriology Abstracts (Microbiology B); Genetics Abstracts

The YoeB Toxin Is a Folded Protein That Forms a Physical Complex with the Unfolded

YefM Antitoxin: Implications for a structural-based differential stability of

toxin-antitoxin systems

Cherny, Izhack; Rockah, Liat; Gazit, Ehud

Abstract:

The chromosomal YoeB-YefM toxin-antitoxin module common to numerous strains of bacteria is presumed to have a significant role... ..protein, as we previously reported for the Phd antitoxin in the P1 phage Doc-Phd toxin-antitoxin system. Here we report the purification and structural properties of the YoeB toxin and present physical evidence for the existence of a tight YoeB.YefM polypeptide complex in... ..physical complex between the proteins. Near- and far-UV circular dichroism spectroscopy of the purified toxin revealed that, similar to the Doc toxin, YoeB is a well-folded protein. Thermal denaturation experiments confirmed the conformational stability of the YoeB toxin, which underwent reversible thermal unfolding at temperatures up to 56 degree C. The thermodynamic features of the toxin-antitoxin complex were similar. Taken together, our results support the notion of a correlation between differential physiological and structural stability in toxin-antitoxin modules.

Identifiers: YoeB toxin; YoeM toxin

Subj Catg:

8/3,K/4 (Item 1 from file: 50) Links

Fulltext available through: STIC Full Text Retrieval Options

CAB Abstracts

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0008636224 CAB Accession Number: 20043072465

The role of *Bacillus thuringiensis* CryIC and CryIE separate structural domains in the interaction with *Spodoptera littoralis* gut epithelial cells.

Avisar, D.; Keller, M.; Gazit, E.; Prudovsky, E.; Sneh, B.; Zilberstein, A.

Author email address: aviah@post.tau.ac.il

Department of Plant Sciences, George S. Wise Faculty of Life Sciences, Tel Aviv

University, Tel Aviv 69978, Israel.

Journal of Biological Chemistry vol. 279 (16) : p.15779-15786

Publication Year: 2004

ISSN: 0021-9258

Digital Object Identifier: 10.1074/jbc.M312597200

Publisher: American Society for Biochemistry and Molecular Biology Inc Bethesda , USA

Language: English Record Type: Abstract

Document Type: Journal article

... and lower K SUB d than CryIC domain II and further supported the existence of toxin multisite interactions. Competitive binding assays were used to estimate the sequence of interaction events. CryIC... ..three domains specifically interact with the epithelial cell membrane. The folding of the three-domain toxin probably

antitoxintoxin.txt
dictates the sequence of interaction events.

Avisar, D.; Keller, M.; Gazit, E.; Prudovsky, E.; Sneh, B.; Zilberstein, A.

8/3,K/5 (Item 2 from file: 50) Links
Fulltext available through: STIC Full Text Retrieval Options
CAB Abstracts
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0007654000 CAB Accession Number: 19981112254
The structure and organization within the membrane of the helices composing the pore-forming domain of *Bacillus thuringiensis* delta-endotoxin are consistent with an "umbrella-like" structure of the pore.

Gazit, E.; Rocca, P. la; Sansom, M. S. P.; Shai, Y.
Department of Biological Chemistry, Weizmann Institute of Science, Rehovot, 76100, Israel.

Proceedings of the National Academy of Sciences of the United States of America
vol. 95 (21): p.12289-12294

Publication Year: 1998

ISSN: 0027-8424

Language: English Record Type: Abstract

Document Type: Journal article

... The relative affinities for membranes of peptides corresponding to the seven helices that compose the toxin pore-forming domain, their modes of membrane interaction, their structures within membranes, and their orientations...

Gazit, E.; Rocca, P. la; Sansom, M. S. P.; Shai, Y.

8/3,K/6 (Item 3 from file: 50) Links
Fulltext available through: STIC Full Text Retrieval Options

CAB Abstracts
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0007590985 CAB Accession Number: 19980504640
Bacillus thuringiensis cytolytic toxin associates specifically with its synthetic helices A and C in the membrane bound state. Implications for the assembly of oligomeric transmembrane pores.

Gazit, E.; Burshtein, N.; Ellar, D. J.; Sawyer, T.; Shai, Y.
Department of Membrane Research and Biophysics, Weizmann Institute of Science, Rehovot 76100, Israel.

Biochemistry (Washington) vol. 36 (49): p.15546-15554

Publication Year: 1997

ISSN: 0006-2960

Language: English Record Type: Abstract

Document Type: Journal article

Bacillus thuringiensis cytolytic toxin associates specifically with its synthetic helices A and C in the membrane bound state. Implications...

... corresponding to beta5, beta6, and beta7 strands, to a conserved nonhelical region of the CytA toxin of *B. thuringiensis* subsp. *israeliensis* (P SUP 149-170), to helices B and D, and... 149-170 and helix D bind the membrane weakly. Membrane permeation experiments suggested that CytA toxin exerts its activity by aggregation of several monomers. To learn about the structural elements that... the membrane. Taken together, these results provide further support for the suggestion that the CytA toxin self-assembles within membrane and that helices A and C are major structural elements involved in the membrane interaction and intermolecular assembly of the toxin.

Gazit, E.; Burshtein, N.; Ellar, D. J.; Sawyer, T.; Shai, Y.

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Fulltext available through: STIC Full Text Retrieval Options

CAB Abstracts

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0006949830 CAB Accession Number: 19950500311

Structural characterization, membrane interaction, and specific antibody assembly within phospholipid membranes of hydrophobic segments from *Bacillus thuringiensis* var. *israelensis* cytolytic toxin.

Gazit, E.; Shai, Y.

Department of Membrane Research and Biophysics, Weizmann Institute of Science, Rehovot 76100, Israel.

Biochemistry (Washington) vol. 32 (46): p.12363-12371

Publication Year: 1993

ISSN: 0006-2960

Language: English Record Type: Abstract

Document Type: Journal article

... specific antibody assembly within phospholipid membranes of hydrophobic segments from *Bacillus thuringiensis* var. *israelensis* cytolytic toxin.

The *B. thuringiensis* subsp. *israelensis* (Bti) cytolytic toxin is hypothesized to exert its toxic activity via pore formation in the cell membrane as a result of the aggregation of several monomers. To gain insight into the toxin's mode of action, 2 putative hydrophobic 22 amino acid peptides were synthesized and characterized... ..helix-2), and the other to amino acids 50-71 (termed helix-1) of the toxin. Circular dichroism spectroscopy revealed that both segments adopt high alpha-helical content in the hydrophobic... ..for helices-1 and -2 in the assembly and in the pore formation by Bti toxin.

Gazit, E.; Shai, Y.

8/3,K/8 (Item 1 from file: 98) Links

General Sci Abs

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03808148 H.W. Wilson Record Number: BGS198058148

The structure and organization within the membrane of the helices composing the pore-forming domain of *Bacillus thuringiensis* d-endotoxin are consistent with an "umbrella-like" structure of the pore.

Gazit, Ehud

La Rocca, Paolo; Sansom, Mark S. P

Proceedings of the National Academy of Sciences of the United States of America (Proc Natl Acad Sci U S A) v. 95 no21 (Oct. 13 '98) p. 12289-94

Special Features: bibl il ISSN: 0027-8424

Language: English

Country of Publication: United States

Gazit, Ehud

Abstract: ...the results suggest an "umbrella" model for the structure of the pores formed by the toxin. The findings also support previous suggestions that the a7 helix may function as the binding...

Descriptors:

Bacillus thuringiensis toxin; Membrane fusion

8/3,K/9 (Item 2 from file: 98) Links

General Sci Abs

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02754244 H.W. Wilson Record Number: BGS194004244

Structural characterization, membrane interaction, and specific assembly within phospholipid membranes of hydrophobic segments from *Bacillus thuringiensis* var. *israelensis* cytolytic toxin.

Gazit, Ehud
 Shai, Yechiel
 Biochemistry (American Chemical Society) (Biochemistry) v. 32 (Nov. 23 '93) p.
 12363-71
 Document Type: Feature Article
 Special Features: bibl il ISSN: 0006-2960
 Language: English
 Country Of Publication: United States
 ...and specific assembly within phospholipid membranes of hydrophobic segments from
 Bacillus thuringiensis var. israelensis cytolytic toxin.

Gazit, Ehud

Abstract: The Bacillus thuringiensis var. israelensis (Bti) cytolytic toxin is hypothesized to exert its toxic activity via pore formation in the cell membrane as a result of the aggregation of several monomers. To gain insight into the toxin's mode of action, 2 putative hydrophobic 22 amino acid peptides were synthesized and characterized... Ellar, D. J., & Chilcott, C. N. (1988) J. Mol. Biol. 202, 527-535 of the toxin. Circular dichroism spectroscopy revealed that both segments adopt high α -helical content in a hydrophobic... for helices-1 and -2 in the assembly and in the pore formation by Bti toxin. Copyright 1993, American Chemical Society. .

Descriptors:
 Bacillus thuringiensis toxin; Membranes (Biology...

8/3,K/10 (Item 3 from file: 98) Links
 General Sci Abs
 (c) 2009 The HW Wilson Co. All rights reserved.
 02514029 H.W. Wilson Record Number: BGSI93014029
 Structural and functional characterization of the $\alpha 5$ segment of Bacillus thuringiensis d-endotoxin.

Gazit, Ehud
 Shai, Yechiel
 Biochemistry (American Chemical Society) (Biochemistry) v. 32 (Apr. 6 '93) p.
 3429-36
 Document Type: Feature Article
 Special Features: bibl il ISSN: 0006-2960
 Language: English
 Country Of Publication: United States
 Gazit, Ehud

Descriptors:
 Bacillus thuringiensis toxin; Proteins...

8/3,K/11 (Item 1 from file: 143) Links
 Biol. & Agric. Index
 (c) 2009 The HW Wilson Co. All rights reserved.
 1068609 H.W. Wilson Record Number: BBAI99041346
 The Doc toxin and Phd antidote proteins of the bacteriophage P1 plasmid addiction system form a heterotrimeric complex

Gazit, Ehud
 Sauer, Robert T
 The Journal of Biological Chemistry v. 274 no24 (June 11 1999) p. 16813-18
 Document Type: Feature Article ISSN: 0021-9258
 The Doc toxin and Phd antidote proteins of the bacteriophage P1 plasmid addiction system form a heterotrimeric complex
 Gazit, Ehud

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8/3,K/12 (Item 1 from file: 399) Links

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147516306 CA: 147(25)516306m JOURNAL
Structural and Thermodynamic Characterization of the Escherichia coli RelBE
Toxin-Antitoxin System: Indication for a Functional Role of Differential Stability
Author: Cherny, Izhack; Overgaard, Martin; Borch, Jonas; Bram, Yaron; Gerdes, Kenn;
Gazit, Ehud
Location: Department of Molecular Microbiology and Biotechnology, George S. Wise
Faculty of Life Sciences, Tel Aviv University, 69978, Tel Aviv-Jaffa, Israel
Journal: Biochemistry
Date: 2007
Volume: 46 Number: 43 Pages: 12152-12163
CODEN: BICHAW
ISSN: 0006-2960
Publisher Item Identifier: 0006-2960(70)01037-1
Language: English
Publisher: American Chemical Society

8/3,K/13 (Item 2 from file: 399) Links

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147482564 CA: 147(23)482564b CONFERENCE PROCEEDING
Bacterial toxin-antitoxin systems as targets for the development of novel
antibiotics
Author: Alonso, Juan C.; Balsa, Dolores; Cherny, Izhack; Christensen, Susanne K.;
Espinosa, Manuel; Francuski, Djordje; Gazit, Ehud; Gerdes, Kenn; Hitchin, Ed;
Martin, M. Teresa; Nieto, Concepcion; Overweg, Karin; Pellicer, Teresa; Saenger,
Wolfram; Welfle, Heinz; Welfle, Karin; Wells, Jerry
Location: Department of Microbial Biotechnology, Centro Nacional de Biotecnologia,
CSIC, Madrid, Spain, 28049
Journal: Enzyme-Mediated Resist. Antibiot.
Editor: Bonomo, Robert A. (Ed), Tolmasky, Marcelo (Ed),
Date: 2007
Pages: 313-329
CODEN: 69JIC6
Language: English
Publisher: American Society for Microbiology, Washington, D. C

8/3,K/14 (Item 3 from file: 399) Links

CA SEARCH(R)

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142367629 CA: 142(20)367629m PATENT
Antibacterial agents disrupting toxin-antitoxin binding and methods of identifying
and utilizing such agents
Inventor (Author): Gazit, Ehud; Cherny, Izhack
Location: Israel
Assignee: Ramot at Tel Aviv University Ltd.
Patent: PCT International ; WO 200531362 A2 Date: 20050407
Application: WO 200411898 (20040927) *US 2003PV507488 (20031002) *US 2004PV550334
(20040308)
Pages: 108 pp.
CODEN: PIXXD2
Language: English
Patent Classifications:
Class: G01N-033/68A

antitoxintoxin.txt

Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SV; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW
Designated Regional: BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

8/3,K/15 (Item 4 from file: 399) Links

Fulltext available through: STIC Full Text Retrieval Options

CA SEARCH(R)

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140334320 CA: 140(21)334320J JOURNAL
The YefM Antitoxin Defines a Family of Natively Unfolded Proteins: Implications as a Novel Antibacterial Target
Author: Cherny, Izhack; Gazit, Ehud
Location: George S. Wise Faculty of Life Sciences, Department of Molecular Microbiology and Biotechnology, Tel-Aviv University, 69978, Tel-Aviv, Israel
Journal: J. Biol. Chem.
Date: 2004
Volume: 279 Number: 9 Pages: 8252-8261
CODEN: JBCHA3
ISSN: 0021-9258
Language: English
Publisher: American Society for Biochemistry and Molecular Biology

8/3,K/16 (Item 5 from file: 399) Links

Fulltext available through: STIC Full Text Retrieval Options

CA SEARCH(R)

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130048562 CA: 130(5)48562g JOURNAL
The structure and organization within the membrane of the helices composing the pore-forming domain of Bacillus thuringiensis .delta.-endotoxin are consistent with an "umbrella-like" structure of the pore
Author: Gazit, Ehud; La Rocca, Paolo; Sansom, Mark S. P.; Shai, Yechiel
Location: Department of Biological Chemistry, Weizmann Institute of Science, 76100, Rehovot, Israel
Journal: Proc. Natl. Acad. Sci. U. S. A.
Date: 1998
Volume: 95 Number: 21 Pages: 12289-12294
CODEN: PNASA6
ISSN: 0027-8424
Language: English
Publisher: National Academy of Sciences

8/3,K/17 (Item 6 from file: 399) Links

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128044828 CA: 128(5)44828s JOURNAL
Bacillus thuringiensis Cytolytic Toxin Associates Specifically with Its Synthetic Helices A and C in the Membrane Bound State. Implications for the Assembly of Oligomeric Transmembrane Pores
Author: Gazit, Ehud; Burshtein, Noga; Ellar, David J.; Sawyer, Trevor; Shai, Yechiel

antitoxintoxin.txt
Location: Department of Membrane Research and Biophysics, Weizmann Institute of
Science, 76100, Rehovot, Israel
Journal: Biochemistry
Date: 1997
Volume: 36 Number: 49 Pages: 15546-15554
CODEN: BICHAW
ISSN: 0006-2960
Publisher Item Identifier: 0006-2960(97)00758-7
Language: English
Publisher: American Chemical Society

8/3,K/18 (Item 7 from file: 399) Links
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123027507 CA: 123(3)27507r CONFERENCE PROCEEDING
Membrane interaction and hemolytic activity of the .alpha.5 helix of
.delta.-endotoxin
Author: Gazit, Ehud; Shai, Yechiel
Location: Department Membrane Research and Biophysics, Weizmann Institute Science
Rehovot, 76100, Israel
Journal: Recent Adv. Mol. Biochem. Res. Proteins, Proc. IUBMB Symp. Protein Struct.
Funct.
Editor: Wei, Yau-huei (Ed), Chen, Ching-san (Ed), Su, Jong-ching (Ed),
Date: 1993
Pages: 145-53
CODEN: 61HNAL
Language: English
Meeting Date: 920000
Publisher: World Sci. , Singapore, Singapore

8/3,K/19 (Item 8 from file: 399) Links
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122003545 CA: 122(1)3545e JOURNAL
The .alpha.-5 segment of Bacillus thuringiensis .delta.-endotoxin: in vitro
activity, ion channel formation and molecular modeling
Author: Gazit, Ehud; Bach, Diana; Kerr, Ian D.; Sansom, Mark S. P.; Chejanovsky,
Nor; Shai, Yechiel
Location: Dep. Membrane Res. Biophys., Weizmann Inst. Sci., 76100, Rehovot, Israel
Journal: Biochem. J.
Date: 1994
Volume: 304 Number: 3 Pages: 895-902
CODEN: BIJOAK
ISSN: 0264-6021
Language: English

8/3,K/20 (Item 9 from file: 399) Links
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118163181 CA: 118(17)163181d JOURNAL
Structural and functional characterization of the .alpha.5 segment of Bacillus
thuringiensis .delta.-endotoxin
Author: Gazit, Ehud; Shai, Yechiel
Location: Dep. of Membrane Res. Biophys., Weizmann Inst. Sci., 76100, Rehovot,
Israel

Journal: Biochemistry
Date: 1993
Volume: 32 Number: 13 Pages: 3429-36
CODEN: BICHAW
ISSN: 0006-2960
Language: English

8/3,K/21 (Item 1 from file: 185) Links

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Zoological Record Online(R)

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04966596 BIOSIS No. 14008048631

The role of *Bacillus thuringiensis* CryIC and CryIE separate structural domains in the interaction with *Spodoptera littoralis* gut epithelial cells.

Authors: Avisar, Dror; Keller, Menahem; Gazit, Ehud; Prudovsky, Evgenia; Sneh, Baruch; Zilberstein, Aviah (a)

Authors Address: (a) Tel Aviv Univ, George S Wise Fac Life Sci, IL-69978 Tel Aviv; Israel aviah@post.tau.ac.il

Source: Journal of Biological Chemistry 279(16), April 16 2004: 15779-15786. [Print]

Document Type: Article

ISSN: 0021-9258

Languages: English Summary Languages: English

Record Type: Abstract

Authors: Avisar, Dror; Keller, Menahem; Gazit, Ehud; Prudovsky, Evgenia; Sneh, Baruch; Zilberstein, Aviah...

Abstract: ...higher Bmax and lower Kd than CryIC domain II and further supported the existence of toxin multisite interactions. Competitive binding assays were used to estimate the sequence of interaction events. CryIC... ..three domains specifically interact with the epithelial cell membrane. The folding of the three-domain toxin probably dictates the sequence of interaction events.

8/3,K/22 (Item 1 from file: 149) Links

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03335715 Supplier Number: 163707106 (USE FORMAT 7 OR 9 FOR FULL TEXT)

The yefM-yoeB toxin-antitoxin systems of *Escherichia coli* and *Streptococcus pneumoniae*: functional and structural correlation.(Author abstract)

Nieto, Concha; Cherny, Izhack; Khoo, Seok Kooi; de Lacoba, Mario Garcia; Chan, Wai Ting; Yeo, Chew Chieng; Gazit, Ehud; Espinosa, Manuel

Journal of Bacteriology , 189 , 3-4 , 1266(13)

Feb ,

2007

Document Type: Author abstract Publication Format: Magazine/Journal

ISSN: 0021-9193

Language: English

Record Type: Abstract Target Audience: Academic

The yefM-yoeB toxin-antitoxin systems of *Escherichia coli* and *Streptococcus pneumoniae*: functional and structural correlation.(Author abstract)

...Gazit, Ehud

Author Abstract: Toxin-antitoxin loci belonging to the yefM-yoeB family are located in the chromosome or in... ..of *Streptococcus pneumoniae*, and these genes encode bona fide antitoxin (Yef(M.sub.Spn)) and toxin (Yoe(B.sub.Spn)) products. We showed that overproduction of Yoe(B.sub.Spn)... is... ..homologous, whereas the antitoxins appeared to be specifically designed for each bacterial locus; thus, the toxin-antitoxin interactions were adapted to the different bacterial environmental conditions. Both structural features, folding and...

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| S1 | 276 | S E1-E4 |
| S2 | 42 | S S1 AND TOXIN |
| S3 | 28 | S E1-E3 |
| S4 | 22 | S S3 AND ANTITOXIN |
| S5 | 42 | S S2 |
| S6 | 42 | S S5 AND TOXIN |
| S7 | 42 | S S6 AND TOXIN |
| S8 | 22 | RD (unique items) |